

Receiving Report

Date: 11-12-17

Batch No: 131121

Supplier: Tempo

Dart P/O: 26440

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☒ No ☐
 Receipt: Cash ☐ Cr ☒
 New Supplier Yes ☐ No ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☒ No ☐
 Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC18 Inspection ☐ N/A ☒
 Work Order ☐ N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number

Initials of Receiver QC12

Production/Admin:
 Date:
 Received/Costing:
 Initial:

Location



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO26440

Purchase Order Date 11/10/2014

PO Print Date 11/10/2014

Page Number 1 of 2

Order From :

TEMPO AEROSPACE INC.
205 FENMAR DR.
TORONTO, ON M9L 2X4
CA

VC-TEM001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 416 746 2233

Ship To Contact

Ship To Phone

Ship Via: Purolator ground collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Ext
1	71400-11	4500-P-23Y YELLOW EPOXY PRIMER	11/19/2014		4.00 Each	\$124.00	\$496
Procurement Quality Clauses			Yes				
A005 RIGHT OF ENTRY			11/19/2014				
A014 SHELF LIFE CONTROLLED MATERIAL; 70% SHELF							
LIFE REQUIRED AT RECEIPT							
A026 CERTIFICATION OF MATERIAL CONFORMANCE							
A040 NOTIFICATION OF QUALITY ESCAPE							
A042 DART NOTIFICATION BY SUPPLIER							
A043 RETENTION OF QUALITY DOCUMENTS							

Deliver To: ANDY

Line Total: \$496

2 71400-11 DEF-23377-1-N10KT
AQUA GREEN PRIMER 11/19/2014

4.00
Each \$289.15 \$1,156

Deliver To: ANDY

Line Total: \$1,156

Note:

11/10/2014



Tempo Aerospace Inc.

205 Fenmar Drive
Toronto ON M9L 2X4 Canada
Phone: 416.746.2233 Fax: 416.746.2235
orderdesk@tempo-aerospace.com

Packing Slip

No. 28061

Pg:1/2



Ship To : [1]

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

For : Account No. [DARTAS]

Dart Aerospace Ltd.
Attn: Chantal Lovoie, Buyer
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada
Tel.: (613) 632-9577
Fax: (613) 632-1053

S.O. No.	: 7881	Our Ref	:	Domestic AWB	:
Cust P.O.	: PO26440	Your Ref	:	Int'l AWB	:
Picked On	: Dec-15-2014	Trans Mode	: GROUND	Origin	:
Shipped On	: Dec-15-2014	Req. Docs	: CC,TR,SD	Transport	:
Ship Via	: PUROLATOR GROUND	Lic No.	:	Nationality	:
Incoterms	: FREE CARRIER	Expires	:	Trip/Flight	:
Terms	: NET 30				
Ship Via Acct.	: PUROLATOR GROUND Account No. 7684382				
Our Contact	: House Account				

Line	P/N & Description	Ordered	Qty Shipped	Back Order	Packaging
4	DEF-23377-1-N-1GKT Aqua Green, Chrome Free Epoxy Primer Spec1: MIL-PRF-23377K Ty.I CL.N	4	4 KT	0	(In Box:b) (Qty 2 in Pkg:a) (In Box:b) (Qty 2 in Pkg:b)
5	DEF-02GN084 BASE: Aqua Green Chromate Free Epoxy Primer UID: 15257  Spec1: MIL-PRF-23377K TY I CL.N Batch #: 104519 LINE VOLUME: [ML] 11,360.000	4	4 GC	0	
6	DEF-02GN084CAT CURE: Aqua Green Epoxy Primer UID: 15258  Spec1: MIL-PRF-23377K TY I CL.N Batch #: 104520 LINE VOLUME: [ML] 3,788.000 For a DANGEROUS GOODS EMERGENCY, call Canutec at the 24 hours number (613) 996-6666 / Pour une MARCHANDISES DANGEREUSES URGENCE, appeler Canutec au nombre de 24 heures (613) 996-6666	4	4 QC	0	
Box No.	Box(es) Type / Description Dimension Type [CM]	Gross Weight [KG]	Net Weight [KG]		Box(es) ID

SP14-12-17



Tempo Aerospace Inc.

205 Fenmar Drive
Toronto ON M9L 2X4 Canada
Phone: 416.746.2233 Fax: 416.746.2235
orderdesk@tempo-aerospace.com

Packing Slip

Trans Mode : GROUND
Req. Docs : CC,TR,SD

Pick Ticket No. 28061 / Page : 2/2

Line	P/N & Description	Ordered	Qty Shipped	Back Order	Packaging
1	4X1 Double Walled Brown Box L 14.750 x W 14.500 x H 8.250	0.000	0.000		a
2	4X1 Double Walled Brown Box L 14.750 x W 14.500 x H 8.250	0.000	0.000		b
<div>SP 14-12-17</div> <div>Sean Chapman</div>					

Picked By :

Sean Chapman, PRESIDENT

PRC-DeSoto International, Inc.

Certificate of Conformance

PPG Aerospace - Deft
17451 VON KARMAN AVE, IRVINE,
CA 92614-6295
Phone No.: (800) 544-3338 or
(949) 474-0400

Pick List: P453205

Cust No. 771015
Bill-To: 771015B07
PRC ASC CANADA
Do not mail invoices:
aerospace_apinvoices@ppg.com
CA 91342 USA

Branch: BINT
Sales Order No.: S 6657
Total Cartons: .00

Customer P.O. TC50156

Ship-To: 7710150955
TEMPO AEROSPACE, INC.
205 FENMAR DRIVE
TORONTO, ON M9L 2X4 CANADA
Phone:

Contract/Credit Auth
Number:

Mark For: NO EEI FTR 30.36
CODE: 3208.90.0000
SHIP USING MANITOULIN TRANSPORT ACCT # 0064671
LORNA B. # 416-746-2233

Remarks: BROKER: LIVINGSTON INTERNATIONAL; IMPORTER OF RECORD

Order Date	Ship Date	Terms	Freight Terms	Via	Service Rep	
12/06/2014	12/10/2014	Net 30 Days	Freight Collect	Manitoulin Transport	eddie	
Line	Order Qty	Product	Description / Reference Number	UOM	Pick Qty	No of Cartons

1	4	02GN084 GK	8010-01-555-3381 MIL-PRF-23377K, TY I, CL N, GALLON KIT	EA		4
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8010-01-555-3381 MIL-PRF-23377K (MIL-PRF-23377J), TYPE I,
CLASS N, GALLON KIT; SPTMRA01 GRADE A & B
P/N: DE02GN084XMPY22K

Customer PO: CUST P/O # 305478

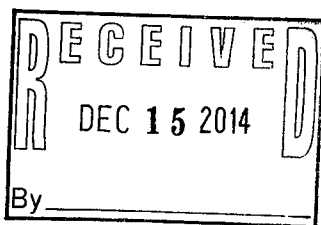
Lot Number:

104519/104520

4

DOM: November 2014 DOE: 11/20/14 DOM of Repack: 11/10 DOE of Repack: 11/10

Total Cartons: .00



Picked By: _____

Checked By: _____

1

12/6/2014

PPG Aerospace/PRC DeSoto International certifies that the above materials have been manufactured, tested and conforms to all requirements in accordance with applicable specifications. All test data pertaining to batch acceptance requirements defined by the specification for this material is on file and available for inspection upon request. For Non-US PPG Customers, we can only offer Technical Data/Test Reports for any ITAR or EAR restricted specifications with valid US export authorization

Christopher Tafel

Christopher Tafel - Quality Assurance Specialist

Test Report for MIL-PRF-23377K, Type I, Class N
Formerly MIL-PRF-23377J, Type I, Class N Amendment 2

FED STD 595 Color: green Date: 11/10/2014
Deft Code, Base: 02GN084 Deft Code, Catalyst: 02GN084CAT
Batch No., Base: 104519 Batch No., Catalyst: 104520
Customer:
Contract/PO Number:

TEST REQUIREMENTS

TEST RESULTS

Composition (3.4)	
Lead metal or compounds	<0.05% by weight
Incidental Cadmium and compounds	< 1 ppm
Chromium Content (3.4.1.3) [class N only] ≤ 5 ppm	≤ 5 ppm
Volatile Content (3.4.2) - 340 G/L maximum	251 g/L
Physical Component Properties (3.5)	
Fineness of Grind (3.5.1) - 5 min	5
Condition in Container (3.5.2)	Conforms
Physical Admixed Properties (3.6)	
Color (3.6.1)	Conforms for Type
Odor (3.6.2)	Characteristic
Viscosity (3.6.3), Admixed - 40" max in #4 Ford Cup	19.47
Pot Life (3.6.4), After 4 hrs. 70" max in #4 Ford Cup	29.88
Physical Film Properties (3.7)	
Surface Appearance (3.7.1)	No Abnormalities
Drying Time (3.7.2)	
1. Tack Free, 5 hours maximum	5 Hours
2. Dry-Hard, 8 hours maximum	8 Hours
Lifting (3.7.3)	No Lifting
Adhesion (3.7.4), in water 24 hrs @ room temp	No Peeling
Flexibility (3.7.5) 10% minimum, GE Impacter	10%
Resistance Properties (3.8)	
Water Resistance (3.8.1) 4 days @ 120 deg F	No Deficiency
Solvent Resistance (3.8.3) min 25 double MEK rubs	>25 MEK rubs
Fluid Resistance (3.8.4)	
1. MIL-PRF-23699, 24 hours @ 250 deg F.	No Deficiency
2. MIL-PRF-83282, 24 hours @ 150 deg F.	No Deficiency
Working Properties (3.9)	
Mixing and Dilution (3.9.1)	No Separation
Application (3.9.2)	No Sags or Runs

I certify that these test were performed in accordance with the specification test procedure and that the test results in this report as submitted are true, valid and represent required for the above mentioned batch numbers.

SIGNED: 

TITLE: Q.C. Technician

PRC-DeSoto International, Inc., 17451 Von Karman Ave., Irvine, CA 92614

Material Safety Data Sheet



Date of issue 15 November 2014

Version 5

1. Product and company identification

Product name : 02GN084 BASE COMPONENT
Code : 02GN084
Supplier : PPG Aerospace PRC-DeSoto
12780 San Fernando Road
Sylmar, CA 91342
Phone: 818 362 6711
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)

2. Hazards identification

Emergency overview : DANGER!

FLAMMABLE LIQUID AND VAPOR. CAUSES EYE BURNS. HARMFUL IF ABSORBED THROUGH SKIN. CAUSES RESPIRATORY TRACT AND SKIN IRRITATION. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION. MAY BE HARMFUL IF INHALED OR SWALLOWED. SANDING AND GRINDING DUSTS MAY BE HARMFUL IF INHALED. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Keep away from heat. Do not smoke. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Irritating to respiratory system. Can irritate eyes, nose, mouth and throat. May cause sensitization by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion : May be harmful if swallowed. May cause burns to mouth, throat and stomach.
Skin : Toxic in contact with skin. Irritating to skin. May cause an allergic skin reaction.
Eyes : Corrosive to eyes. Causes burns.

Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Can form nitrosamines in the presence of certain organic materials and if heated.

Medical conditions aggravated by over-exposure : Pre-existing respiratory and skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

2. Hazards identification

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Gypsum	13397-24-5	10 - 30
4-chloro- α,α,α -trifluorotoluene	98-56-6	10 - 30
butan-2-ol	78-92-2	5 - 10
titanium dioxide	13463-67-7	5 - 10
cyclohexanone	108-94-1	5 - 10
diprasedymium trioxide	12036-32-7	1 - 5
pentan-2-one	107-87-9	1 - 5
benzyl alcohol	100-51-6	1 - 5
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	25068-38-6	1 - 5
crystalline silica, respirable powder (>10 microns)	14808-60-7	0.5 - 1.5
bisphenol A	80-05-7	0.1 - 1
4-nonylphenol, branched	84852-15-3	0.1 - 1
3,6-diazaoctanethylenediamin	112-24-3	0.1 - 1
4-methylpentan-2-one	108-10-1	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

Suitable	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Not suitable	: Do not use water jet.

5. Fire-fighting measures

- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
sulfur oxides
halogenated compounds
carbonyl halides
metal oxide/oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

7. Handling and storage

Storage

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

8. Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
Gypsum	TWA	10 mg/m ³	15 mg/m ³ TD 5 mg/m ³ R	10 mg/m ³	Not established	Not established
4-chloro- α,α,α -trifluorotoluene	TWA	Not established	Not established	Not established	Not established	25 ppm
butan-2-ol	TWA	100 ppm	150 ppm	100 ppm	100 ppm	Not established
	STEL	Not established	Not established	150 ppm	150 ppm	Not established
titanium dioxide	TWA	10 mg/m ³	15 mg/m ³ TD	10 mg/m ³ TD	10 mg/m ³ (as Ti)	Not established
	STEL	Not established	Not established	Not established	20 mg/m ³ (as Ti)	Not established
cyclohexanone	TWA	20 ppm S	50 ppm	20 ppm S	50 ppm S	Not established
	STEL	50 ppm S	Not established	50 ppm S	100 ppm S	Not established
dipraseodymium trioxide	TWA	10 mg/m ³ TD	15 mg/m ³ TD 5 mg/m ³ R	Not established	Not established	Not established
pentan-2-one	TWA	Not established	200 ppm	Not established	200 ppm	Not established
	STEL	150 ppm	Not established	150 ppm	Not established	Not established
benzyl alcohol	TWA	Not established	Not established	Not established	Not established	10 ppm
crystalline silica, respirable powder (>10 microns)	TWA	0.025 mg/m ³ R	10 MG/M3 / (%SiO ₂ +2) R Z 250 MPPCF / (%SiO ₂ +5) R Z	0.1 mg/m ³ R	0.1 mg/m ³ R	Not established
bisphenol A	STEL	Not established	Not established	Not established	Not established	5 mg/m ³
3,6-diazaoctanethylenediamin	TWA	Not established	Not established	0.5 ppm S	Not established	1 ppm S

8 . Exposure controls/personal protection

4-methylpentan-2-one	TWA	20 ppm	100 ppm	50 ppm	50 ppm	Not established Not established
	STEL	75 ppm	Not established	75 ppm	75 ppm	

Key to abbreviations

A = Acceptable Maximum Peak
 ACGIH = American Conference of Governmental Industrial Hygienists.
 C = Ceiling Limit
 F = Fume
 IPEL = Internal Permissible Exposure Limit
 OSHA = Occupational Safety and Health Administration.
 R = Respirable
 Z = OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

S = Potential skin absorption
 SR = Respiratory sensitization
 SS = Skin sensitization
 STEL = Short term Exposure limit values
 TD = Total dust
 TLV = Threshold Limit Value
 TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Chemical splash goggles and face shield.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves : butyl rubber

Respiratory : By spraying: air-fed respirator. By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state	: Liquid.
Flash point	: Closed cup: 7.78°C (46°F)
Material supports combustion.	: Yes.
Color	: Gray.
Odor	: Not available.
pH	: Not available.
Boiling/condensation point	: 99.44 to 173.33°C (211 to 344°F)
Melting/freezing point	: Not available.
Specific gravity	: 1.41
Density (lbs / gal)	: 11.77
Vapor pressure	: 0.95 kPa (7.1 mm Hg) [room temperature]
Vapor density	: Not available.
Evaporation rate	: Not available.
VOC	: 405 g/l
Solubility	: Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: Not available.
% Solid. (w/w)	: 51.06

10 . Stability and reactivity

Stability	: Stable under recommended storage and handling conditions (see Section 7).
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid	: Reactive or incompatible with the following materials: acids, oxidizing materials, strong alkalis
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1-chloro- α,α,α -trifluorotoluene	LD50 Oral	Rat	13 g/kg	-
	LD50 Dermal	Rabbit	>2.7 g/kg	-
	LC50 Inhalation Vapor	Rat	33080 mg/m3	4 hours
butan-2-ol	LD50 Oral	Rat	2054 mg/kg	-
	LC50 Inhalation Vapor	Rat	48500 mg/m3	4 hours
titanium dioxide	LD50 Oral	Rat	>10 g/kg	-
	LD50 Oral	Rat	1.54 g/kg	-
	LD50 Dermal	Rabbit	0.948 g/kg	-
cyclohexanone	LC50 Inhalation Vapor	Rat	8000 ppm	4 hours
	LD50 Oral	Rat	1600 mg/kg	-
	LD50 Dermal	Rabbit	6500 mg/kg	-
pentan-2-one	LD50 Oral	Rat	1.23 g/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
	LD50 Dermal	Rabbit	2000 mg/kg	-
benzyl alcohol	LD50 Oral	Rat	>2 g/kg	-
	LD50 Oral	Rat	>2 g/kg	-
reaction product: bisphenol-A-	LD50 Oral	Rat		
	LD50 Oral	Rat		

11 . Toxicological information

(epichlorhydrin); epoxy resin	LD50 Dermal	Rabbit	>2 g/kg	-
bisphenol A	LD50 Oral	Rat	1200 mg/kg	-
4-nonylphenol, branched	LD50 Dermal	Rabbit	3 g/kg	-
	LD50 Oral	Rat	0.58 g/kg	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	2500 mg/kg	-
4-methylpentan-2-one	LD50 Dermal	Rabbit	805 mg/kg	-
	LD50 Oral	Rat	2.08 g/kg	-
	LC50 Inhalation Vapor	Rat	32772 mg/m3	4 hours

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Defatting irritant

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Target organs

: Contains material which causes damage to the following organs: blood, kidneys, liver, heart, spleen, brain, bone marrow, central nervous system (CNS).
Contains material which may cause damage to the following organs: lungs, upper respiratory tract, skin, bones, eye, lens or cornea, nose/sinuses.

Carcinogenicity

Carcinogenicity : Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

Classification

Product/ingredient name	ACGIH	IARC	NTP
Titanium dioxide	A4	2B	-
cyclohexanone	A3	3	-
crystalline silica, respirable powder (>10 microns)	A2	1	Known to be a human carcinogen.
4-methylpentan-2-one	A3	2B	-

Carcinogen Classification code: ACGIH: A1, A2, A3, A4, A5
IARC: 1, 2A, 2B, 3, 4
NTP: Proven, Possible
Not listed or regulated as a carcinogen: -

Developmental effects : Contains material which may cause developmental abnormalities, based on animal data.

Fertility effects : Contains material which may impair male fertility, based on animal data. Contains material which may impair female fertility, based on animal data.

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	II	II	II	II
Environmental hazards	No.	Yes.	No.	Yes.
Marine pollutant substances	Not applicable.	(reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)	Not applicable.	(reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)

Additional information

DOT : None identified.
TDG : The marine pollutant mark is not required when transported by road or rail.
Mexico : None identified.
IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory information

- United States inventory (TSCA 8b) : All components are listed or exempted.
 Australia inventory (AICS) : At least one component is not listed.
 Canada inventory (DSL) : All components are listed or exempted.
 China inventory (IECSC) : At least one component is not listed.
 Europe inventory (REACH) : Please contact your supplier for information on the inventory status of this material.
 Japan inventory (ENCS) : All components are listed or exempted.
 Korea inventory (KECI) : At least one component is not listed.
 New Zealand (NZIoC) : At least one component is not listed.
 Philippines inventory (PICCS) : At least one component is not listed.

United States

SARA 302/304: No products were found.

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

<u>Chemical name</u>	<u>CAS #</u>	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Reactive</u>	<u>Pressure</u>
Gypsum	13397-24-5	N	N	N	N	N
4-chloro- α,α,α -trifluorotoluene	98-56-6	Y	N	Y	N	N
butan-2-ol	78-92-2	Y	N	Y	N	N
titanium dioxide	13463-67-7	N	Y	N	N	N
cyclohexanone	108-94-1	Y	Y	Y	N	N
diprasedymium trioxide	12036-32-7	N	N	N	N	N
pentan-2-one	107-87-9	Y	N	Y	N	N
benzyl alcohol	100-51-6	Y	N	N	N	N
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	25068-38-6	Y	N	N	N	N
crystalline silica, respirable powder (>10 microns)	14808-60-7	N	Y	N	N	N
4-nonylphenol, branched	84852-15-3	Y	Y	N	N	N
4-methylpentan-2-one	108-10-1	Y	Y	Y	N	N
3,6-diazaoctanethylenediamin	112-24-3	Y	N	N	N	N
Product as-supplied :		Y	Y	Y	N	N

SARA 313

<u>Chemical name</u>	<u>CAS number</u>	<u>Concentration</u>
Supplier notification butan-2-ol	78-92-2	5 - 10

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Canada

WHMIS (Canada) : Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class E: Corrosive liquid. Class D-1B: Material causing immediate and serious toxic effects (Toxic). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico**Classification**

Flammability : 3 Health : 3 Reactivity : 0

Product code 02GN084

Date of issue 15 November 2014 Version 5

Product name 02GN084 BASE COMPONENT

16 . Other information

Hazardous Material Information System (U.S.A.)

Health : 3 * Flammability : 3 Physical hazards : 0
(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 3 Flammability : 3 Instability : 0

Date of previous issue : 5/17/2014.

Organization that prepared : EHS
the MSDS

☑ Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Material Safety Data Sheet



Date of issue 1 December 2014

Version 4.01

1. Product and company identification

Product name : 02GN084 CURING SOLUTION COMPONENT

Code : 02GN084NCAT

Supplier : PPG Aerospace PRC-DeSoto
12780 San Fernando Road
Sylmar, CA 91342
Phone: 818 362 6711

Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)

2. Hazards identification

Emergency overview : WARNING!

FLAMMABLE LIQUID AND VAPOR. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF INHALED OR SWALLOWED. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Keep away from heat. Do not smoke. Do not swallow. Do not get on skin or clothing. Avoid breathing vapor or mist. Avoid contact with eyes. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Irritating to respiratory system. Can irritate eyes, nose, mouth and throat.

Ingestion : May be harmful if swallowed.

Skin : Irritating to skin. May cause an allergic skin reaction.

Eyes : Irritating to eyes.

Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness.

Medical conditions aggravated by over-exposure : Pre-existing skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	25068-38-6	60 - 100
pentan-2-one	107-87-9	7 - 13
heptan-2-one	110-43-0	3 - 7
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8	1 - 5
4-methylpentan-2-one	108-10-1	0.5 - 1.5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

- Flammability of the product** : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
halogenated compounds
metal oxide/oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

8 . Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
pentan-2-one	TWA	Not established	200 ppm	Not established	200 ppm	Not established
	STEL	150 ppm	Not established	150 ppm	Not established	Not established
heptan-2-one	TWA	50 ppm	100 ppm	25 ppm	50 ppm	Not established
	STEL	Not established	Not established	Not established	100 ppm	Not established
4-methylpentan-2-one	TWA	20 ppm	100 ppm	50 ppm	50 ppm	Not established
	STEL	75 ppm	Not established	75 ppm	75 ppm	Not established

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection**Eyes**

: Safety glasses with side shields.

Hands

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves

: butyl rubber

8 . Exposure controls/personal protection

- Respiratory** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: 7.78°C (46°F)
- Material supports combustion.** : Yes.
- Color** : Amber.
- Odor** : Not available.
- pH** : Not available.
- Boiling/condensation point** : 100.56 to 152.22°C (213 to 306°F)
- Melting/freezing point** : Not available.
- Specific gravity** : 1.07
- Density (lbs / gal)** : 8.93
- Vapor pressure** : 0.49 kPa (3.7 mm Hg) [room temperature]
- Vapor density** : Not available.
- Evaporation rate** : Not available.
- VOC** : 190 g/l
- Solubility** : Insoluble in the following materials: cold water.
- Partition coefficient: n-octanol/water** : Not available.
- % Solid. (w/w)** : 82.24

10 . Stability and reactivity

- Stability** : Stable under recommended storage and handling conditions (see Section 7).
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- Materials to avoid** : Reactive or incompatible with the following materials: acids, oxidizing materials, strong alkalis
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	LD50 Oral	Rat	>2 g/kg	-
pentan-2-one	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	1600 mg/kg	-
heptan-2-one	LD50 Dermal	Rabbit	6500 mg/kg	-
	LD50 Oral	Rat	1.6 g/kg	-
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	LD50 Dermal	Rabbit	10.206 g/kg	-
	LD50 Oral	Rat	7.01 g/kg	-
4-methylpentan-2-one	LD50 Dermal	Rabbit	4.3 g/kg	-
	LC50 Inhalation	Rat	>5300 mg/m ³	4 hours
	Dusts and mists			
	LD50 Oral	Rat	2.08 g/kg	-
	LC50 Inhalation	Rat	32772 mg/m ³	4 hours
	Vapor			

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Defatting irritant

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Target organs

: Contains material which causes damage to the following organs: brain, skin.
Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, liver, peripheral nervous system, upper respiratory tract, central nervous system (CNS), eye, lens or cornea.

Carcinogenicity

Carcinogenicity : Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

Classification

Product/ingredient name	ACGIH	IARC	NTP
4-methylpentan-2-one	A3	2B	-

Carcinogen Classification code: ACGIH: A1, A2, A3, A4, A5
IARC: 1, 2A, 2B, 3, 4
NTP: Proven, Possible
Not listed or regulated as a carcinogen: -

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a

13 . Disposal considerations

safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	II	II	II	II
Environmental hazards	No.	Yes.	No.	Yes.
Marine pollutant substances	Not applicable.	(reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)	Not applicable.	(reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)

Additional information

DOT : None identified.

TDG : The marine pollutant mark is not required when transported by road or rail.

Mexico : None identified.

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15 . Regulatory information

United States inventory (TSCA 8b) : All components are listed or exempted.

Australia inventory (AICS) : All components are listed or exempted.

Canada inventory (DSL) : All components are listed or exempted.

China inventory (IECSC) : All components are listed or exempted.

Europe inventory (REACH) : Please contact your supplier for information on the inventory status of this material.

Japan inventory (ENCS) : All components are listed or exempted.

Korea inventory (KECI) : All components are listed or exempted.

New Zealand (NZIoC) : All components are listed or exempted.

Philippines inventory (PICCS) : At least one component is not listed.

United States

15. Regulatory information

SARA 302/304: No products were found.

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

<u>Chemical name</u>	<u>CAS #</u>	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Reactive</u>	<u>Pressure</u>
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	25068-38-6	Y	N	N	N	N
pentan-2-one	107-87-9	Y	N	Y	N	N
heptan-2-one	110-43-0	Y	N	Y	N	N
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8	Y	N	N	Y	N
4-methylpentan-2-one	108-10-1	Y	Y	Y	N	N
Product as-supplied :		Y	Y	Y	N	N

SARA 313

Supplier notification

Chemical name

4-methylpentan-2-one

CAS number

108-10-1

Concentration

0.5 - 1.5

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Canada

WHMIS (Canada)

: Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Classification

Flammability : 3 Health : 2 Reactivity : 0

16. Other information**Hazardous Material Information System (U.S.A.)**

Health : 2 * Flammability : 3 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 3 Instability : 0

Date of previous issue : 5/17/2014.

Organization that prepared the MSDS : EHS

☑ Indicates information that has changed from previously issued version.

Disclaimer

16 . Other information

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.